

Amendments to the Claims:

1. (Cancelled)

2. (Currently Amended) [[An]] The MRI system according to claim [[1]] 7, comprising multiple fixed dedicated receive coils located at ~~different~~ fixed positions relative to the examination space.

3. (Cancelled)

4. (Currently Amended) [[An]] The MRI system according to claim [[3]] 7, wherein the dedicated receive coil is fixed to the interior of the cover plate ~~or to the exterior of the cover plate.~~

5. (Currently Amended) [[An]] The MRI system according to claim [[1]] 7, ~~wherein the housing comprises at least one cover plate adjacent the examination space,~~ wherein the dedicated receive coil is integrated in the cover plate.

6. (Cancelled)

7. (Currently Amended) An MRI system ~~according to claim 3,~~ wherein comprising:

a housing defining an examination space for receiving a body for examination, the housing comprising at least one cover plate adjacent the examination space, the cover plate [[is]] being used as a detachable part of the housing;

a magnetic field generating system for generating a magnetic field in the examination space;

an electromagnetic resonance receive system which comprises at least one dedicated receive coil;

wherein said at least one dedicated receive coil is fixedly attached to the cover plate of the housing.

8. (Currently Amended) [[An]] The MRI system according to claim 7, wherein the cover plate comprises two or more plate segments, coupled to each other by hinges.

9. (Cancelled)

10. (Currently Amended) [[An]] The MRI system according to claim [[1]] 7, wherein the MRI system is configured to perform SENSE imaging and the dedicated receive coils of the electromagnetic resonance receive system further includes one or more separate antenna elements supported by the cover plate in fixed locations when the cover plate is attached to the housing.

11. (Currently Amended) [[An]] The MRI system according to claim [[1]] 7, further comprising a patient table being displaceable into and out of the examination space, wherein the electromagnetic resonance receive system further includes one or more additional receive coils mounted in or under the patient table[[,]] and fixed to the patient table.

12. (New) A magnetic resonance imaging system in which a generally cylindrical examination space is surrounded by a magnetic field generating system and an RF transmit system and further comprising:

a housing which houses the magnetic field generating system and the RF transmit system, the housing including a cylindrical cover plate which surrounds the examination space and separates the examination space from the magnetic field generating system and the RF transmit coils;

a patient table which selectively moves a patient into and out of the examination space; and,

dedicated receive coils separate from the RF transmit system attached to the cylindrical cover plate.

13. (New) The MRI system according to claim 12, wherein the dedicated receive coils are embedded in the cover plate, the cover plate being configured of an electrically insulating material.

14. (New) The MRI system according to claim 12, further including:

an additional dedicated receive coil mounted in the table to receive magnetic resonance signals from below the patient, the dedicated receive coils affixed to the cylindrical bore being disposed to the sides and above the patient to receive magnetic resonance signals from the sides and above the patient.

15. (New) The MRI system according to claim 12, wherein the dedicated receive coils are removably affixed to an examination space facing surface of the cylindrical cover plate.

16. (New) The MRI system according to claim 12, wherein the dedicated receive coils are permanently affixed to a surface of the cover plate which faces the RF transmit system.

17. (New) A magnetic resonance imaging system having a magnetic field generating system and RF transmit coils, the MRI system further comprising:

a housing constructed of an electrically insulating material which surrounds the magnetic field generating system and the RF transmit coils and including at least one electrically insulating, fixedly mounted cover plate which separates the magnetic field generating system and the RF transmit coils from an examination space;

a table for moving a patient into and out of the examination space; and,

a plurality of dedicated receive coils of a thickness of 1 mm or less affixed to the at least one insulating cover plate.

18. (New) The MRI system according to claim 17, wherein the dedicated receive coils are configured of thin copper strips.

19. (New) The MRI system according to claim 17, wherein the at least one insulating cover plate includes a plurality of interchangeable, detachable cover plates, one of the cover plates having the dedicated receive coils attached thereto and a second of the cover plates being a blank cover plate without coils affixed to it.

20. (New) The MRI system according to claim 17, wherein the dedicated receive coils include copper strips embedded in the at least one insulating cover plate.

21. (New) The MRI system according to claim 17, wherein the dedicated receive coils are mounted on a substrate which is configured for detachable fixation to the cover plate.

22. (New) The MRI system according to claim 17, wherein the insulating cover plate is cylindrical.

23. (New) The MRI system according to claim 17, wherein the dedicated receive coils include a plurality of receive antenna elements and the MRI system includes a magnetic resonance imaging and reconstruction system that requires the position of the receive antenna elements to be accurately known and wherein the receive antenna elements of the dedicated receive coils are fixedly positioned to the at least one cover plate in accurately known positions.